

Title (en)
BATTERY CARD ASSEMBLY FOR ELECTRICAL APPARATUSES

Title (de)
BATTERIEKARTEN-ANORDNUNG FÜR ELEKTROGERÄTE

Title (fr)
ASSEMBLAGE À CARTES DE BATTERIE POUR APPAREILS ÉLECTRIQUES

Publication
EP 1116284 B1 20071003 (EN)

Application
EP 99943617 A 19990723

Priority
US 9916657 W 19990723

Abstract (en)
[origin: WO0106580A1] A battery power supply system consisting of battery card, battery card assembly where battery card slots in, and charger where battery card gets recharged is disclosed. The standardized battery card is designed in light, thin, safe, and user-friendly card configuration to make interchangeability between appliances easy and possible. In addition, outside the battery card there is an injection mechanism that fits the battery card in the battery card assembly when slot-in and inject-out, and inside the battery card there is a built-in fuel gauge circuit that regulates voltage with an LED indicator. The battery card assembly is designed either for single or multiple battery cards. In the case of using single battery card, the battery card assembly connects to a power buffer in the electrical apparatus so the user can change their battery card without turning off the electrical apparatus within a certain time interval. In the case of multiple battery cards, the battery card assembly connects power to the electrical apparatus from only one of the battery cards. Until the first battery card is completely discharged, the battery card assembly automatically switches to another battery card without disturbing the electrical apparatus operation.

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Cited by
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